

WE CLAIM:

1. An ultraviolet (UV) water disinfecter, comprising:
a feed water delivery system,
an inlet chamber housing at least a portion of the feed water delivery system,
a baffle wall downstream of the feed water delivery system, the baffle wall having a plurality of spaced perforations,
an air-suspended UV lamp, and
a treatment chamber beneath the UV lamp downstream of the baffle wall, wherein water is driven by gravity at a flow rate of 8 liters per minute or less.
2. The UV water disinfecter of claim 1, wherein said feed water delivery system is adapted to connect to a household tap.
3. The UV water disinfecter of claim 1, further comprising a notch in said inlet chamber adapted to allow excess water to overflow, and an outer shell adapted to collect water which overflows.
4. The UV water disinfecter of claim 1, wherein the UV lamp is adapted to provide narrowband UV radiation.
5. The UV water disinfecter of claim 4, wherein the UV lamp uses less than 25 watts of power.
6. The UV water disinfecter of claim 5, wherein the UV lamp uses less than about 20 watts of power.
7. The UV water disinfecter of claim 6, wherein the UV lamp uses about 8 - 15 watts of power.
8. The UV water disinfecter of claim 1, wherein the feed water delivery system has a flow rate of about 4 liters per minute or less.
9. The UV water disinfecter of claim 1, wherein the feed water delivery system has a flow rate within a range of about 1-3 liters per minute.
10. The UV water disinfecter of claim 1, having a length of about 48 cm or less, a width of about 19.5 cm or less, and a height of about 15.75 cm or less.
11. The UV water disinfecter of claim 1, having a length of 40 cm or less, a width of 16.25 cm or less, and a height of 13.125 cm or less.

12. The UV water disinfecter of claim 1, having a length within a range of about 35.2 – 28.8 cm, a width within a range of about 14.3 – 11.7 cm, and a height within a range of about 11.55 – 9.45 cm.

13. An ultraviolet (UV) water disinfecter, comprising:
a feed water delivery system,
an inlet chamber housing at least a portion of the feed water delivery system,
a baffle wall downstream of the feed water delivery system, the baffle wall having a plurality of spaced perforations,
an air-suspended UV lamp using 20 watts of power or less, and
a treatment chamber beneath the UV lamp downstream of the baffle wall.

14. The UV water disinfecter of claim 13, wherein the feed water delivery system and treatment chamber are configured to deliver water, under influence of gravity, at a rate of less than about 8 liters per minute.

15. The UV water disinfecter of claim 13, wherein the UV lamp comprises a low pressure mercury lamp.

16. The UV disinfecter of claim 13, having a length of about 40 cm or less, a width of about 16.25 cm or less and a height of about 13.125 cm or less.